

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,413	07/18/2003	Michael Joseph McCloskey	TR-155-US	2791
36630 VICTORIA D	7590 09/06/2007 ONNELLY		EXAMINER	
VICTORIA DONNELLY PO BOX 24001			TRAN, DZUNG D	
HAZELDEAN KANATA, ON			ART UNIT	PAPER NUMBER
CANADA	N NZIVI ZCS		2613	
•			MAIL DATE	DELIVERY MODE
			09/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/621,413	MCCLOSKEY ET AL.			
		Examiner	Art Unit			
		Dzung D. Tran	2613			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status	•	·				
1)🖂	Responsive to communication(s) filed on 21 June 2007.					
	This action is FINAL . 2b) ☐ This action is non-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
·	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims	·				
4)🖂	Claim(s) <u>1-13</u> is/are pending in the application.	,				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
	Claim(s) <u>1-13</u> is/are rejected.					
·	Claim(s) is/are objected to.	•				
	Claim(s) are subject to restriction and/or election requirement.					
Applicati	on Papers					
9) 🗀 '	The specification is objected to by the Examine	r.				
	The drawing(s) filed on is/are: a) ☐ acce		xaminer.			
٠٠,٣	Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	The oath or declaration is objected to by the Ex					
	inder 35 U.S.C. § 119					
		priority under 35 U.S.C. & 110(a)	(d) or (f)			
_	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)L	a) All b) Some * c) None of:					
	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
3	nee the attached detailed Office action for a list of	of the certified copies not receive	u.			
Attachment(s)						
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Ll Interview Summary Paper No(s)/Mail Da	•			
3) Information Disclosure Statement(s) (PTO/SB/08) 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Art Unit: 2613

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 3-6 and 12-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Clark et al. US publication no. 2004/0208516.

Regarding claims 1 and 12, Clark discloses in Figures 3 and 5, a method/apparatus for pre-emphasizing power level launched into an optical network, comprising the steps of:

- (a) selecting an optical link (e.g., span 1, span 2, ..., span n) between a transmitter 350 and a receiver 370 in the optical network, the optical link being divided into a number of sections (e.g., n sections) by monitoring points (e.g., monitoring signal power by monitor 380 at any m point where m<n) located between the transmitter and the receiver;
- (b) selecting a first section of the optical link nearest to the transmitter in the optical network (e.g., selecting the first sub-set of span, for example 5 span);

Art Unit: 2613

(c) gradually increasing optical power of an optical signal provided to the selected section of the optical link from the transmitter until the optical signal is detected at the monitoring point belonging to the selected section (page 3, paragraph 0033).

- (d) verifying if the detected optical signal is being detected at a correct location according to a network specification and if the power of the detected optical signal is at the expected level according to the network specification (page 3, paragraph 0033)
- (e) selecting a next section of the optical link adjacent to the previously selected section and further away from the transmitter in the optical network (e.g., selecting the next sub-set of span, for example the next 5 span is located at 10 span); and
- (f) repeating the steps (c) to (e) until all sections in the optical link have been selected (page 3, paragraph 0033).

Regarding claim 3, Clark discloses wherein the step of gradually increasing the optical power comprises increasing the optical power continuously (e.g., by increasing power of Laser diodes 405; page 3, paragraphs 0032-0033).

Regarding claim 4, Clark discloses wherein the step of gradually increasing optical power comprises decreasing attenuation of attenuators in the optical network (e.g., by decreasing attenuation of attenuators 415; page 3, paragraphs 0032-0033).

Regarding claim 5, Clark discloses the step of setting attenuation of attenuators (page 3, paragraph 0033) and gain settings of amplifiers in the selected section (e.g., amplifying the optical signal by line unit 225; page 3, paragraph 0026) the step being performed after the step (d) of verifying.

Art Unit: 2613

Regarding claims 6 and 13, Clark discloses gradually increasing optical power comprises increasing the optical power in steps provided by sets of precalculated link budgets (page 3, paragraph 0033).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 2, 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al. US publication no. 2004/0208516.

Regarding claim 2, Clark does not specifically disclose wherein the step of selecting an optical link comprises selecting an optical link that has one section and one first monitoring point located at the receiver. However, if the system having the short optical link from transmitter to receiver; e.g., optical link < 8 spans (page 3, paragraph 0030), then it would have been obvious to an artisan that the monitoring point can be located at the receiver.

Regarding claim 7, Clark does not specifically disclose for detecting the optical signal at the monitoring point by detecting a dither tone modulated onto the signal. However, Examiner take an official notice that to detect the optical of each signal

Art Unit: 2613

channel base on a dither tone modulated onto the signal channel is well known in the art.

Regarding claims 8-11, whether to reconnect the selected section of the optical link according to the network specification, if the step (d) of verifying gives the results that the detected optical signal is not being detected at the correct location or the method being performed on a pre-existing optical network so that pre-existing signals on the network are not being disturbed and pre-existing amplifier gain settings are not being changed or the method being performed on the link in the optical network remotely is merely an engineering design choices. At the time of the invention was made, it would have been obvious to an artisan to reconnect the selected section of the optical link according to the network specification, if the step (d) of verifying gives the results that the detected optical signal is not being detected at the correct location or the method being performed on a pre-existing optical network so that pre-existing signals on the network are not being disturbed and pre-existing amplifier gain settings are not being changed or the method being performed on the link in the optical network remotely depend on system design.

Response to Arguments

5. Applicant's arguments filed on 06/21/2007 have been fully considered but they are not persuasive.

Art Unit: 2613

A) Rejection claims 1 and 12 under 35 USC 102(e) as being anticipated by Clark et al. U.S. Publication no. 2004/0208516.

Applicant argues that Clark does not teach a limitation "a method and system for power up an optical network". However, power up an optical network is in the preamble only and the preamble limitation is not considered as patentable weight.

Applicant further argues that Clark does not teach gradually increasing optical power of an optical signal provided to the selected section of the optical link from the transmitter until the optical signal is detected. However, page 3, paragraph 0033 clearly discloses for gradually increasing optical power of an optical signal provided to the selected section of the optical link from the transmitter until the optical signal is detected.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 10/621,413 Page 7

Art Unit: 2613

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dzung Tran 09/02/2007

DZUNG TRAN
PRIMARY PATENT EXAMINER